



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2014-0345; Directorate Identifier 2013-NM-230-AD]**

**RIN 2120-AA64**

**Airworthiness Directives;** Beechcraft Corporation (Type Certificate Previously Held by Hawker Beechcraft Corporation; Raytheon Aircraft Company; Beech Aircraft Corporation) Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Beechcraft Corporation (Type Certificate Previously Held by Hawker Beechcraft Corporation; Raytheon Aircraft Company; Beech Aircraft Corporation) Model 400, 400A, 400T, and MU-300 airplanes. This proposed AD was prompted by a report of a failure of the Acme nut threads in a pitch trim actuator (PTA). This proposed AD would require an inspection to determine if PTAs having a certain serial number and part number are installed, and replacement if they are installed. This proposed AD would also require repetitive replacements of PTAs with new PTAs or certain overhauled PTAs. We are proposing this AD to prevent failure of the Acme nut threads in the PTA, which could lead to loss of control of pitch trim and reduced controllability of the airplane.

**DATES:** We must receive comments on this proposed AD by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Beechcraft Corporation, TMDC, P.O. Box 85, Wichita, KS 67201-0085; telephone 316-676-8238; fax 316-671-2540; email [tmdc@beechcraft.com](mailto:tmdc@beechcraft.com); Internet <http://pubs.beechcraft.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0345; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Ann Johnson, Aerospace Engineer, Systems and Propulsion Branch, ACE-116W, FAA, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, KS 67209; phone: (316) 946-4105; fax: (316) 946-4107; email: [Ann.Johnson@faa.gov](mailto:Ann.Johnson@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the **ADDRESSES** section. Include “Docket No. FAA-2014-0345; Directorate Identifier 2013-NM-230-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

### **Discussion**

We have received a report of a failure of the Acme nut threads in a PTA, due to accelerated thread wear on the Acme nut that mates with the jackscrew. This condition, if not corrected, could result in failure of the Acme nut threads in the PTA, which could lead to loss of control of pitch trim and reduced controllability of the airplane.

### **Relevant Service Information**

We reviewed Hawker Beechcraft Mandatory Service Bulletin 27-4100, dated March 2012. This service bulletin describes procedures for an inspection to determine if PTAs having a certain serial number and part number are installed, and replacing those PTAs having specific serial numbers listed in the service bulletin.

### **FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs.

### **Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under "Differences Between this Proposed AD and the Service Information."

### **Differences Between this Proposed AD and the Service Information**

Although Hawker Beechcraft Mandatory Service Bulletin 27-4100, dated March 2012, does not require repetitive replacements, this proposed AD would require repetitive replacements of PTAs with new PTAs or with overhauled PTAs having an Acme nut and jackscrew replaced with a new Acme nut and jackscrew every 1,800 flight hours or at the next PTA overhaul, whichever occurs first.

While the effectivity of Hawker Beechcraft Mandatory Service Bulletin 27-4100, dated March 2012, does not include Model MU-300 airplanes, those airplanes are included in the applicability of this proposed AD since the affected PTAs can also be used on these airplanes.

### **Costs of Compliance**

We estimate that this proposed AD affects 735 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

### Estimated costs

| Action   | Labor cost   | Parts cost               | Cost per product         | Cost on U.S. operators       |
|--|--|--------------------------|--------------------------|------------------------------|
| Identification of serial/part numbers (735 airplanes)                    | 1 work-hour X \$85<br>per hour = \$85                    | \$0                      | \$85                     | \$62,475                     |
| Replacement of PTA (26 airplanes)  | 10 work-hours X \$85<br>per hour = \$850 per replacement | \$17,334 per replacement | \$18,184 per replacement | \$472,784 per replacement    |
| Repetitive replacement of jackscrew and Acme nut on PTAs (735 airplanes) | 10 work-hours X \$85<br>per hour = \$850 per replacement | \$17,334 per replacement | \$18,184 per replacement | \$13,365,240 per replacement |

According to the manufacturer, the costs of this proposed AD associated with Hawker Beechcraft Mandatory Service Bulletin 27-4100, dated March 2012, may be covered under warranty, thereby reducing the cost impact on affected owners/operators. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate. The costs of the repetitive replacement are not covered under warranty. However, the PTA manufacturer states that it is already replacing the Acme nut and jackscrew at every overhaul, so the owners/operators should not see a cost increase due to this repetitive replacement requirement.

#### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This proposed regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Beechcraft Corporation (Type Certificate Previously Held by Hawker Beechcraft Corporation; Raytheon Aircraft Company; Beech Aircraft Corporation):**

Docket No. FAA-2014-0345; Directorate Identifier 2013-NM-230-AD.

#### **(a) Comments Due Date**

We must receive comments by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to the airplanes identified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category.

(1) Beechcraft Corporation (Type Certificate Previously Held by Hawker Beechcraft Corporation; Raytheon Aircraft Company; Beech Aircraft Corporation) airplanes identified in paragraphs (c)(1)(i), (c)(1)(ii), and (c)(1)(iii) of this AD.

(i) Model 400 Beechjet airplanes having serial numbers RJ-1 through RJ-65, inclusive.

(ii) Model 400A Beechjet airplanes having serial numbers RK-1 through RK-604, inclusive.

(iii) Model 400T Beechjet airplanes having serial numbers TT-1 through TT-180, inclusive, and TX-1 through TX-13, inclusive.

(2) Beechcraft Corporation (Type Certificate Previously Held by Hawker Beechcraft Corporation; Raytheon Aircraft Company; Mitsubishi Heavy Industries, Inc. Ltd.) Model MU-300 airplanes, having serial numbers A003SA through A093SA, inclusive.

**(d) Subject**

Air Transport Association (ATA) of America Code 27, Flight Controls.

**(e) Unsafe Condition**

This AD was prompted by a report of a failure of the Acme nut threads in a pitch trim actuator (PTA). We are issuing this AD to prevent failure of the Acme nut threads in the PTA, which could lead to loss of control of pitch trim and reduced controllability of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Determination of Serial Number and Part Number**

Within 200 flight hours or 6 months after the effective date of this AD, whichever occurs first, inspect to determine the serial number and part number of the PTA, in accordance with the Accomplishment Instructions of Hawker Beechcraft Mandatory Service Bulletin 27-4100, dated March 2012. A review of manufacturer delivery and operator maintenance records is acceptable, in lieu of the inspection, if the serial number and part number of the PTA can be conclusively determined from that review.

**(h) Replacement**

If any serial number and part number found during an inspection required by paragraph (g) of this AD is one listed in Table 1 or Table 2 of Hawker Beechcraft Mandatory Service Bulletin 27-4100, dated March 2012: Within 200 flight hours or 6 months after the effective date of this AD, whichever occurs first, replace the PTA with a serviceable PTA or an overhauled PTA having an Acme nut and jackscrew replaced

with a new Acme nut and jackscrew, in accordance with the Accomplishment Instructions of Hawker Beechcraft Mandatory Service Bulletin 27-4100, dated March 2012.

**(i) Repetitive Replacements**

Within 1,800 flight hours after the effective date of this AD, or at the next PTA overhaul, whichever occurs first, replace the PTA with a new PTA or an overhauled PTA having the Acme nut and jackscrew replaced with a new Acme nut and jackscrew, in accordance with sections 3.A.(2), (3), and (5) through (10) of Hawker Beechcraft Mandatory Service Bulletin 27-4100, dated March 2012. Repeat the replacement thereafter at intervals not to exceed 1,800 flight hours, or at every PTA overhaul, whichever occurs first.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Wichita Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (k)(1) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(k) Related Information**

(1) For more information about this AD, contact Ann Johnson, Aerospace Engineer, Systems and Propulsion Branch, ACE-116W, FAA, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, KS 67209; phone: (316) 946-4105; fax: (316) 946-4107; email: [Ann.Johnson@faa.gov](mailto:Ann.Johnson@faa.gov).

(2) For service information identified in this AD, contact Beechcraft Corporation, TMDC, P.O. Box 85, Wichita, KS 67201-0085; telephone 316-676-8238; fax 316-671-2540; email [tmdc@beechcraft.com](mailto:tmdc@beechcraft.com); Internet <http://pubs.beechcraft.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on June 10, 2014.

**Jeffrey E. Duven,**  
*Manager,*  
*Transport Airplane Directorate,*  
*Aircraft Certification Service.*

**BILLING CODE 4910-13-P**

**[FR Doc. 2014-15246 Filed 06/27/2014 at 8:45 am; Publication Date: 06/30/2014]**